Amendments to the claims (this listing replaces all prior versions):

1. (Currently amended) A method of processing frames of data comprised of frameword bytes and a payload, comprising:

identifying a start of a first frame of data and a phase of the first frame concurrently based on the frameword bytes; and

aligning data in a second frame of data, based on the phase of the first frame, to make a start of the second frame coincide with a start of a byte boundary.

2. (Original) The method of claim 1, wherein the frameword bytes identify the start of the first frame.

3. (Currently amended) The method of claim 1, further comprising:

receiving the data for the first frame; and

storing the data for the first frame in N ~~(N≥2)~~ , N ≥ 2, registers;

wherein the phase of the first frame is identified based on a location of the start of the first frame in the N registers.

4. (Original) The method of claim 3, further comprising:

locating the start of the first frame in the N registers.

5. (Original) The method of claim 4, wherein locating the start of the first frame comprises:

comparing data for the first frame in the N registers to predetermined values for the frameword bytes.

6. (Original) The method of claim 3, wherein identifying the phase of the first frame comprises determining a location, in one of the N registers, of a first bit of data for a first frameword byte.

7. (Original) The method of claim 3, wherein the location of the start of the first frame in the N registers is determined based on whether a value stored in one of the N registers corresponds to a set of predefined values.

8. (Original) The method of claim 6, wherein aligning the data comprises shifting the first bit of data so that a first bit of data in the second frame is at a start of one of the N registers.

9. (Original) The method of claim 1, further comprising:

dividing the data for the first and second frames into blocks;

wherein the start of the first frame and the phase of the first frame are identified in one of the blocks and aligning is performed on the second frame.

10. (Original) The method of claim 1, further comprising:

identifying a predetermined number of frames following identifying the start of the first frame and the phase of the first frame;

wherein aligning is performed on the second frame after identifying the predetermined number of frames.

11. (Original) The method of claim 1, wherein the start of the byte boundary comprises a start of a word boundary.

12. (Currently amended) An apparatus for processing frames of data comprised of frameword bytes and a payload, comprising:

a detector which identifies a start of a first frame of data and a phase of the first frame concurrently based on the frameword bytes; and

a word rotator which aligns data in a second frame of data, based on the phase of the first frame, to make a start of the second frame coincide with a start of a byte boundary.

13. (Original) The apparatus of claim 12, wherein the frameword bytes identify the start of the first frame.

14. (Currently amended) The apparatus of claim 12, wherein:

the detector comprises N ~~(N≥2)~~ , $N \geq 2$, registers which receive the data for the first frame, and which store the data for the first frame; and

the detector identifies the phase of the first frame based on a location of the start of the first frame in the N registers.

15. (Original) The apparatus of claim 14, wherein the detector locates the start of the first frame in the N registers.

16. (Original) The apparatus of claim 15, wherein the detector locates the start of the first frame by comparing data for the first frame in the N registers to predetermined values for the frameword bytes.

17. (Original) The apparatus of claim 14, wherein the detector identifies the phase of the first frame by determining a location, in one of the N registers, of a first bit of data for a first frameword byte.

18. (Original) The apparatus of claim 14, wherein the detector determines the location of the start of the first frame in the N registers based on whether a value stored in one of the N registers corresponds to a set of predefined values.

19. (Original) The apparatus of claim 17, wherein the word rotator aligns the data by shifting the first bit of data so that a first bit of data in the second frame is at a start of one of the N registers.

20. (Original) The apparatus of claim 12, further comprising:

circuitry which divides the data for the first and second frames into blocks;

wherein the detector identifies the start of the first frame and the phase of the first frame in one of the blocks and the word rotator performs aligning on the second frame.

21. (Original) The apparatus of claim 12, further comprising:

a state machine which identifies a predetermined number of frames following identifying the start of the first frame and the phase of the first frame;

wherein the word rotator performs aligning on the second frame after the state machine identifies the predetermined number of frames.

22. (Original) The apparatus of claim 12, wherein the start of the byte boundary comprises a start of a word boundary.

23. (Currently amended) An article comprising a machine-readable medium that stores executable instructions to process frames of data comprised of frameword bytes and a payload, the instructions causing a machine to:

identify a start of a first frame of data and a phase of the first frame concurrently based on the frameword bytes; and

align data in a second frame of data, based on the phase of the first frame, to make a start of the second frame coincide with a start of a byte boundary.

24. (Original) The article of claim 23, wherein the frameword bytes identify the start of the first frame.

25. (Currently amended) The article of claim 23, further comprising instructions that cause the machine to:

receive the data for the first frame; and

store the data for the first frame in N ~~(N≥2)~~ , N ≥ 2, registers;

wherein the phase of the first frame is identified based on a location of the start of the first frame in the N registers.

26. (Original) The article of claim 25, further comprising instructions that cause the machine to:

locate the start of the first frame in the N registers.

27. (Original) The article of claim 26, wherein locating the start of the first frame comprises:

comparing data for the first frame in the N registers to predetermined values for the frameword bytes.

28. (Original) The article of claim 25, wherein identifying the phase of the first frame comprises determining a location, in one of the N registers, of a first bit of data for a first frameword byte.

29. (Original) The article of claim 25, wherein the location of the start of the first frame in the N registers is determined based on whether a value stored in one of the N registers corresponds to a set of predefined values.

30. (Original) The article of claim 28, wherein aligning the data comprises shifting the first bit of data so that a first bit of data in the second frame is at a start of one of the N registers.

31. (Original) The article of claim 23, further comprising instructions that cause the machine to:

divide the data for the first and second frames into blocks;

wherein the start of the first frame and the phase of the first frame are identified in one of the blocks and aligning is performed on the second frame.

32. (Original) The article of claim 23, further comprising instructions that cause the machine to:

identify a predetermined number of frames following identifying the start of the first frame and the phase of the first frame;

wherein aligning is performed on the second frame after identifying the predetermined number of frames.